

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

**GOLDEN BRIDGE
TECHNOLOGY, INC.,**

Plaintiff

vs.

**NOKIA, INC., AND LUCENT
TECHNOLOGIES, INC.**

Defendant.

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CIVIL ACTION NO. 2:05cv151

**REPORT AND RECOMMENDATION OF
UNITES STATES MAGISTRATE JUDGE**

Before the Court is Nokia, Inc. and Lucent Technologies, Inc.’s (collectively “Defendants”) Motion for Summary Judgment of Invalidity of United States Patent No. 6,574,267 (the ‘267 patent) in View of the Hakkinen Publication and the IS-95A Standard (Docket No. 124). For the reasons discussed below, the Court **GRANTS** Defendants’ motion.

THE INVENTION

The ‘267 patent relates generally to mobile telecommunications systems, and more specifically describes a method for establishing a communication link between a mobile station, such as a cellular telephone, and a base station, which allows for communication to, and between, mobile stations. Base stations and mobile stations communicate over channels. The particular channel contemplated in the ‘267 patent allows multiple signals to be sent over the same channel rather than devoting a channel to each mobile station. A mobile station seeking to establish a connection with a base station will transmit a preamble to the base station over the shared channel until the base

station recognizes the preamble and responds with a signal called an acknowledgment. Once the acknowledgment is received, the mobile station may begin transmission of data or voice communications.

Using a single channel to transmit multiple signals simultaneously presents two problems that are relevant to the '267 patent. First, the base station must be able to, in the midst of multiple signals, correctly correlate the received preamble with its transmitting mobile station. Therefore, the mobile station provides a unique identifier with each preamble it transmits to allow the base station to properly correlate the preamble with the transmitting mobile station. Using a shared channel also presents the risk that signals traveling on the same channel may interfere with one another. That risk increases as the signal's power level increases. The process of "power ramping" is meant to reduce this risk by ensuring that the lowest possible power level is used to transmit the preamble to the base station. In "power ramping," the mobile station transmits a preamble to the base station at a relatively low power level, and gradually increases the power level until the base station receives the preamble and responds with an acknowledgment.

THE PARTIES' CONTENTIONS

In their motion, Defendants contend that the asserted claims of the '267 patent¹ are anticipated, and therefore invalid, under 35 U.S.C. § 102(b)² by Nokia Telecommunication's Patent Cooperative Treaty publication No. WO9746041 by

¹Plaintiff asserts claims 13 and 23 against Lucent and claims 23-29 against Nokia. The claims are attached to this opinion as Appendix A.

²35 U.S.C. 102(b) provides that a patent is invalid if the claimed invention "was patented or described in a printed publication in this or a foreign country . . . more than one year prior to the date of the application for patent in the United States."

Hakkinen, et al. (“the Hakkinen publication”) and the Mobile Station-Base Station Compatibility Standard for Dual-Mode Wideband Spectrum Cellular System IS-95A (“the IS-95A standard”).³ Defendants state that the IS-95A standard was published in mid-1995 and the Hakkinen publication was published on December 4, 1997 as improvements to IS-95A compliant Code Division Multiple Access Systems. Defendants further contend that much of the IS-95A system is inherent in the Hakkinen publication.

With regard to the IS-95A standard, Plaintiff Golden Bridge Technology, Inc. (“GBT”) argues that the asserted claims are fundamentally different from the procedure disclosed in the IS-95A reference. As its sole basis for distinguishing the two procedures, GBT asserts that in the IS-95A standard, a mobile station transmits an access probe consisting of a preamble and a message while, in contrast, the asserted claims disclose a random access procedure where a preamble without the message is transmitted to the base station.

Concerning the Hakkinen publication, GBT asserts two bases for distinguishing this reference from the asserted claims. First, GBT states that the Hakkinen publication provides for only one specific preamble used to communicate with a particular base station while the asserted claims describe a mobile station selecting a preamble from a set of predefined preambles. Second, GBT asserts that the Hakkinen publication retransmits a preamble when it detects a power-up command while the ‘267 patent retransmits a preamble due to silence or an absence of an acknowledgment from the base station.

APPLICABLE LAW

³According to Defendants’ motion, the Patent Office has determined that the asserted claims are invalid after considering these references for the first time. At the hearing on summary judgment motions, Plaintiff contended that this is an initial determination that could be reversed as the reexamination process proceeds through the Patent Office.

Summary Judgment Standard

Summary judgment shall be rendered when the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law. FED. R. CIV. P. 56(c); *Celotex Corp. v. Catrett*, 477 U.S. 317, 323-25 (1986); *Ragas v. Tenn. Gas Pipeline Co.*, 136 F.3d 455, 458 (5th Cir. 1998). An issue of material fact is genuine if the evidence could lead a reasonable jury to find for the non-moving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). In determining whether a genuine issue for trial exists, the court views all inferences drawn from the factual record in the light most favorable to the non-moving party. *Id.*; *Matsushita Elec. Indus. Co. v. Zenith Radio*, 475 U.S. 574, 587 (1986).

Anticipation

To invalidate patent claims based on prior art, the challenger to the patent must show by clear and convincing evidence that the earlier invention is prior art under section 102⁴ and the earlier invention includes all elements, either explicitly or inherently, of the claims at issue. *See Netscape Commc'ns Corp. v. Konrad*, 295 F.3d 1315, 1320 (Fed. Cir. 2002); *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1327 (Fed. Cir. 2001). “Although anticipation is a question of fact, it still may be decided on summary judgment if the record reveals no genuine issue of material fact.” *Telemac*, 247 F.3d 1316 at 1327. “Summary judgment is proper if no reasonable jury could find that the patent is not anticipated.” *Id.* “The tests for infringement and anticipation are very similar, and ‘that which would literally infringe if later in time anticipates if earlier than

⁴GBT does not appear to dispute that the Hakkinen publication and the IS-95A standard are prior art.

the date of invention.” *Mycogen Plant Science, Inc. v. Monsanto Co.*, 243 F.3d 1316, 1324 (Fed. Cir. 2001)

ANALYSIS

The IS-95A Standard

The Court first turns to the IS-95A standard. As noted above, GBT focuses solely on the fact that the IS-95A standard transmits the preamble *and* the message together prior to the mobile station receiving an acknowledgment while the asserted claims disclose the transmission of the message only after an acknowledgment is received from the base station. Defendants respond that this distinction fails to raise a material fact issue as to anticipation because the asserted claims of the ‘267 patent do not exclude the transmission of a message or something else in addition to the preamble. The Court agrees with Defendants.

The claims asserted here use the transitional term “comprising.” The term comprising is “inclusive or open-ended and does not exclude additional unrecited elements or method steps.” *See CollegeNet, Inc. v. ApplyYourself, Inc.*, 418 F.3d 1225, 1235 (Fed. Cir. 2005); *see also Medichem, S.A. v. Rolabo, S.L.*, 353 F.3d 928, 933 (Fed. Cir. 2003) (“The transition ‘comprising’ in a method claim indicates that the claim is open-ended and allows for additional steps”); *Vehicular Techs. Corp. v. Titan Wheel, Inc.*, 212 F.3d 1377, 1383-84 (Fed. Cir. 2000) (“A drafter uses the term ‘comprising’ to mean ‘I claim at least what follows and potentially more.’”).

It is important to note that the term “message” does not appear in the claims. Further, nothing in the asserted claim language or the specification specifically excludes

the transmission of something in addition to a preamble.⁵ For example, Claim 23 recites “transmitting from a first RS-spread-spectrum transmitter a first preamble at a first discrete power level.” The claim does not say that the preamble is transmitted without a message. Nor do the claims exclude the transmission of data at times other than following the receipt of an acknowledgment. In an infringement context, the Federal Circuit has explained that “if a patent requires A, and the accused device or process uses A and B, infringement will be avoided only if the patent’s definition of A excludes the possibility of B.” *Northern Telecom Ltd. v. Samsung Elecs. Co., Ltd.*, 215 F.3d 1281, 1296-97 (Fed. Cir. 2000); *see Vivid Techs., Inc. v. America Sci. & Eng’g, Inc.*, 200 F.3d 795, 811 (Fed. Cir. 1999) (claims using the signal “comprising” generally signify that the claims do not exclude the presence in the accused apparatus or method of factors in addition to those explicitly recited). Thus, without something in the patent requiring transmission of a preamble only, the addition of a message or something else to the preamble would not avoid infringement. Likewise, in an anticipation context, simply because the preamble and a message are transmitted in the IS-95A standard does not mean that it does not contain all of the limitations in the claims. Accordingly, the Court concludes that the Defendants have shown by clear and convincing evidence that the IS-95A standard discloses each of the limitations contained in the asserted claims.

The Hakkinen Publication

i) Preamble Selection

Turning to the Hakkinen publication, the Court notes that Claims 13 and 23-26 do not contain a limitation regarding a preamble being selected from a set of predefined

⁵Indeed, Figures 6, 7, 9A, and 9B of the ‘267 patent show the transmission of preambles plus something else – pilot signals.

preambles. With regard to the other claims, GBT does not appear to dispute that the IS-95A standard discloses preamble selection and that much of the disclosure of IS-95A is inherent in Hakkinen. Moreover, the Court is not persuaded that the Hakkinen publication teaches the use of only one specific preamble by a mobile station. Rather, it appears to merely provide for the possibility, albeit slight, that the base station might not be able to identify the mobile station because another mobile station is transmitting the same preamble. Ex. 2 to Defendants' motion at p. 6, line 35 - p. 7, line 17. This is different from teaching that the mobile station uses only one specific preamble. The publication states that a preamble may be spread using a long or preferably short spreading code. Ex. 2 to Defendants' motion at p. 6, line 5-9. In addition, it provides that "the signals 15 to be sent [from mobile stations to base stations] are formed by multiplying data by the spreading code. The signals of the subscriber terminal equipments 13 and 14 [the mobile stations] are differentiated from one another by the mutual phase difference of the spreading codes *or by different codes.*" Ex. 2 to Defendants' motion at p. 4, line 18-21 (emphasis added). Accordingly, the Court finds that the Hakkinen publication discloses the selection of a preamble for a set of predefined preambles either explicitly or inherently.

ii) Preamble Retransmission

As to GBT's contention that the Hakkinen publication discloses retransmitting a preamble after receiving a power-up command, the Court notes that by agreement of the parties, claims 23-24, 27 and 29 were construed to require "transmitting multiple preamble signals wherein such transmission is interrupted if an acknowledgment is received, the multiple preamble signals comprising a first preamble signal being

transmitted at a first discrete power level and a second preamble signal being transmitted at a second discrete power level that is higher than the first discrete power level.” The claim construction does not describe a specific trigger for preamble transmission but merely states that multiple preamble transmissions are interrupted when an acknowledgment is received. Thus, it is inconsequential from a legal standpoint how preamble retransmission occurs, i.e. a positive indicator such a power-up command or the absence of an acknowledgment. What is required is multiple preambles that are “interrupted” when an acknowledgment is received.⁶ GBT does not argue that the Hakkinen publication does not teach this limitation.

Having addressed both of GBT’s bases for distinguishing the Hakkinen publication, the Court finds that Defendants have shown by clear and convincing evidence that the Hakkinen publication discloses each of the limitations, either explicitly or inherently, of the asserted claims.

CONCLUSION

For the foregoing reasons, the Court finds that the IS-95A standard and the Hakkinen publication anticipate the asserted claims as a matter of law and **GRANTS** Defendants’ motion for summary judgment as to invalidity.

A party’s failure to file objections to the findings, conclusions, and recommendations contained in this Report within ten days after service with a copy

⁶Assuming that a “trigger” or indicator for preamble retransmission is described in the claim construction, it is the absence of an acknowledgment, as GBT argues, that causes the preamble to be retransmitted. Contrary to GBT’s assertion, however, even if a power-up command is taught in the Hakkinen publication, it is still the lack of acknowledgment that causes the preamble to be retransmitted. The Hakkinen publication describes the interruption of preamble signals when a sending request, i.e. an acknowledgment, is received and if not received, the preamble will be transmitted at a higher power. Ex. 2 to Defendants’ motion at p. 8, line 30 - p.9, line 6; p. 4, line 31- p.5, line 8; Figure 3. Accordingly, Hakkinen discloses the absence of an acknowledgment as the “trigger” for retransmitting the preamble.

thereof shall bar that party from *de novo* review by the district judge of those findings, conclusions and recommendations and, except upon grounds of plain error, from appellate review of the unobjected-to proposed factual findings and legal conclusions accepted and adopted by the district court. *Douglass v. United Services Automobile Association*, 79 F.3d 1415, 1430 (5th Cir. 1996) (*en banc*).

So ORDERED and SIGNED this 6th day of December, 2006.



JOHN D. LOVE
UNITED STATES MAGISTRATE JUDGE

APPENDIX A

13. A base-band processor, for use in a code-division-multiple-access (CDMA) wireless base station having a modulator and a demodulator, the base-band processor comprising:

a preamble processor, coupled to the demodulator, for detecting a preamble in a received spread-spectrum signal;

a data processor, coupled to the demodulator, for detecting and processing any data contained in the received spread-spectrum signal;

an encoder, for encoding data;

an interleaver, coupled to the encoder, for interleaving encoded data;

packet a packet formatter, coupled to the interleaver, for formatting the interleaved data into a packet; and

a controller coupled to the preamble processor and coupled for controlling the modulator, the data processor and the packet formatter, such that in operation the base-band processor is for performing the following steps:

detecting a first one of a sequence of coded preamble signals embedded in a first spread-spectrum signal received at an adequate power level;

upon detection of the first coded preamble signal at the adequate power level, generating a packet comprising an acknowledgment signal, and outputting the packet comprising the acknowledgment signal to the modulator;
and

processing a packet, comprising data, from a second received spread-spectrum signal.

23. A method of operation of a code-division-multiple-access (CDMA) system employing spread-spectrum modulation, with the CDMA system having a base station (BS) with a BS-spread-spectrum transmitter and a BS-spread-spectrum receiver, and a plurality of remote stations, with each remote station (RS) having an RS-spread spectrum transmitter and a RS-spread-spectrum receiver, the method comprising the steps of:

transmitting a broadcast common-synchronization channel, from the BS-spread-spectrum transmitter located at the base station to the plurality of remote stations;

receiving at a first RS-spread spectrum receiver the broadcast common-synchronization channel, and determining a plurality of parameters required for transmission to the base station;

transmitting from a first RS-spread-spectrum transmitter a first preamble at a first discrete power level;

if no acknowledgment corresponding to the previously transmitted preamble is received at the first RS-spread-spectrum receiver by a time following the transmission of the first preamble, transmitting from the first RS-spread-spectrum transmitter a second preamble at a second discrete power level that is higher than the first discrete power level;

receiving the second preamble, at a detected-power level, at the BS-spread-spectrum receiver;

transmitting an acknowledgment of the received preamble from the BS-spread-spectrum transmitter;

receiving the acknowledgment at the first RS-spread-spectrum receiver; and

transmitting a spread-spectrum signal having data from the first RS-spread spectrum transmitter to the BS-spread-spectrum receiver, responsive to the receipt of the acknowledgment.

24. A method of communication through a code-division-multiple-access (CDMA) system employing spread-spectrum modulation, with the CDMA system having a base station (BS) with a BS-spread-spectrum transmitter and a BS-spread-spectrum receiver, and a plurality of remote stations, with each remote station (RS) having a RS-spread spectrum transmitter and a RS-spread-spectrum receiver, the method comprising the steps of:

receiving a broadcast common-synchronization channel from the BS-spread-spectrum transmitter located at the RS-spread-spectrum receiver of one of the remote stations, and determining a plurality of parameters required for transmission to the base station;

transmitting a preamble at a discrete power level from the RS-spread-spectrum transmitter of the one remote stations;

listening for an acknowledgment corresponding to the transmitted preamble at the RS-spread spectrum receiver of the one remote station;

if an acknowledgment is not received, upon expiration of a predetermined interval, following the transmission of the preamble, increasing power

level to a new discrete power level, and repeating the transmitting step and continuing the listening step;

upon receiving an acknowledgment at the RS-spread-spectrum receiver of the one remote station, ceasing preamble transmission and transmitting a spread-spectrum signal having data from the RS-spread-spectrum transmitter of the one remote station, for the BS-spread-spectrum receiver.

25. The method of claim 24, wherein:

the steps of transmitting the preamble and listening for the acknowledgment repeat up to a maximum number of times; and

if no acknowledgment corresponding to the transmitted preamble has been received after the maximum number of repetitions, the one remote station ceases preamble transmission for a period, before resuming the steps of transmitting the preamble and listening for the acknowledgment.

26. The method of claim 24, wherein if the steps of transmitting the preamble and listening for the acknowledgment repeat a plurality of times, the increasing of the power level to a new discrete power level will repeat until power level reaches a maximum value;

27. A method of transferring packet data for a mobile station (MS) with an MS receiver and an MS transmitter, comprising:

receiving at the MS receiver a broadcast common channel from a base station;

determining a plurality of parameters required for transmission to the base station;

spreading an access preamble selected from a set of predefined preambles;

transmitting from the MS transmitter the spread access preamble, at a first discrete power level;

if NO acknowledgment corresponding to the access preamble is detected, transmitting a spread access preamble from the MS transmitter at a second discrete power level higher than the first discrete power level; and

upon detecting an acknowledgment corresponding to a transmitted access preamble, ceasing preamble transmission and transmitting the packet data from the MS transmitter.

28. The method of claim 27, further comprising one or more additional steps of transmitting a spread access preamble at a successively higher power if NO acknowledgment corresponding to any of the preamble transmissions is received, up to a maximum allowed number of preamble transmissions.

29. A code-division-multiple-access (CDMA) wireless handset, comprising:

a CDMA transmitter;

a CDMA receiver; and

a controller coupled to the CDMA receiver for responding to signals received via the CDMA receiver and coupled for controlling the CDMA transmitter, such that in operation the CDMA handset is for performing the following steps:

spreading an access preamble selected from a set of predefined preambles;

transmitting the spread access preamble, at a first discrete power level to a base station;

if NO acknowledgment corresponding to the access preamble is detected, transmitting a spread access preamble from the MS transmitter at a second discrete power level higher than the first discrete power level; and

upon detecting an acknowledgment corresponding to a transmitted access preamble, ceasing preamble transmission and transmitting packet data from the MS transmitter.